

ECE 322 Introduction to Electromagnetics and Applications

Instructor: Danilo Erricolo, email: derric1@uic.edu

Lecture delivery method: Online synchronous.

Lectures will be synchronous via Blackboard on the scheduled days and times of the class. Student attendance is required during the online sessions because short quizzes will be given during each lecture. All exams will be online. Additionally, lectures will be recorded and made available to all students registered for the class through Blackboard.

Laboratory delivery method: on-campus and online synchronous

Laboratory Fee: The ECE department reduced the lab fee to \$25 for the Fall 2020 semester.

How the lab will be run

Lab sessions will start the 3rd week of the semester with a frequency of a lab every week, for a total of 13 laboratory sessions, including one makeup session.

9 of the lab sessions will have students working in groups of two alternating between in-person participation in the laboratory located in room 4255 SEL and remote synchronous participation with their lab partner via Zoom/Blackboard. Webcams connected to a desktop computer will allow the lab partner working remotely that week to participate and communicate with their lab partner during the lab sessions. The focus of these lab sessions will be on measurements, including the **use of our state of the art FieldFox by Keysight Technology**.

3 sessions will be online synchronous via Blackboard during the scheduled laboratory class time and focus on learning how to use **highly sought-out by the industry CAD software Ansys HFSS**, (one academic license will be provided free of charge to each registered student for the semester).

Pre-lab work: Prior to the scheduled lab session, students will have to read the assigned material and /or watch a video as detailed on the syllabus. Students will take a short online quiz before the lab session. The videos will be made available 24h before the lab session and the quiz can be taken right after watching the video and reading the assigned material.

Post-lab work: Each student group will submit electronically their lab report before the assigned deadline. The lab reports will be graded by the TA following a posted rubric and the grade will be made available.

Interactions with TAs or Instructor: TAs will be available for questions during the scheduled lab time or office hours. Peer-help will be available via Piazza. The instructor will be available during office hours, via email, or Piazza.

Personal protective equipment: Everyone will be required to bring, and wear, a mask at all times while in the lab. Everyone will be required to use hand-sanitizer to clean their hands before entering the lab; dispensers will be available at the lab entrance. Disinfecting wipes will be available for the students in the lab to wipe the workstation before starting the experiment. The students working in the lab are expected to bring, and use, their own headphones to connect to the remote partner. In the lab, there will be signage to remind everyone to respect social distancing.

Additional information: Students who are not able to participate in-person laboratory sessions on-campus must notify the instructor and make alternate arrangements prior to the beginning of the semester.